Figure S1. Effect of HS extract on the viability of C3H10T1/2 cells at 24, 48, and 72 h. viability was determined using the MTT assay. ***P<0.001; #P<0.001 vs. Con. HS, hemp seed; con, control.

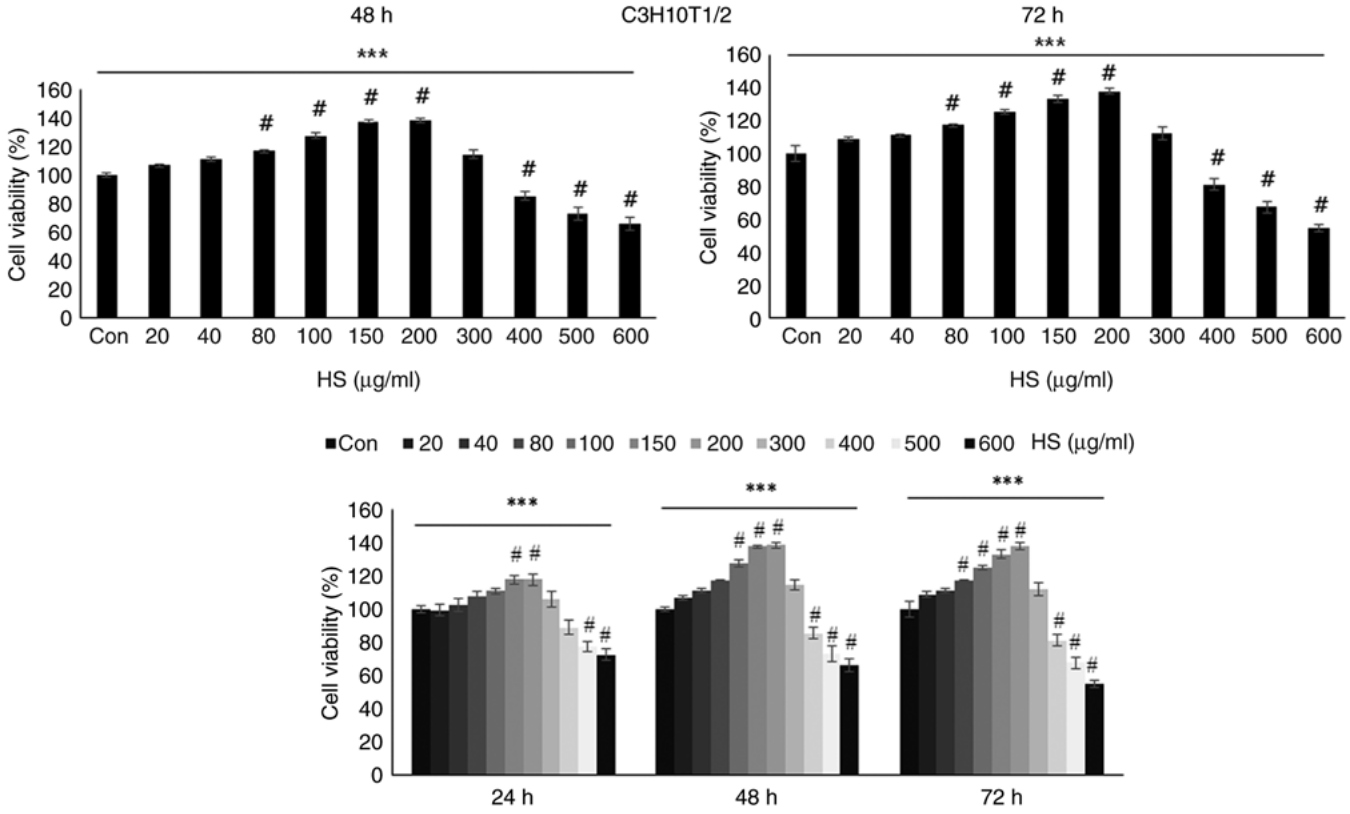

Figure S2. Western blotting of the protein expression of c-caspase3 and caspase3 following treatment of C3H10T1/2 cells with 100, 200 and 500 μg/ml HS extracts for 24 h. c, cleaved; HS, hemp seed; con, control.

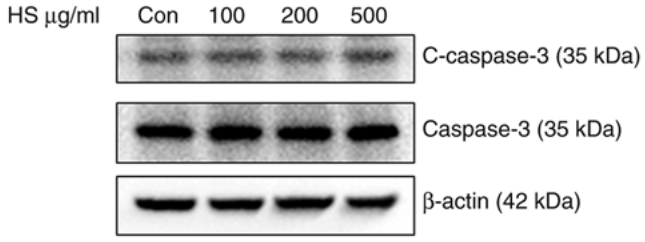

Figure S3. Quantitative analysis of protein expression levels in C2C12 and C3H10T1/2 cells treated with hemp seed extract. (A) GHR, IGF-1, pIGF-1Rβ, and IGF-1Rβ protein levels in cells treated with varying concentrations of HS extract. (B) pJAK2, JAK2, pSTAT5, and STAT5b protein levels in cells treated with varying concentrations of HS extract. Protein expression levels were normalized to β-actin. ***P<0.001; $^{\#}$P<0.001 vs. Control; GHR, growth hormone receptor; IGF-1R, insulin-like growth factor-1receptor; p, phospho; NS, non-significant; HS, hemp seed.

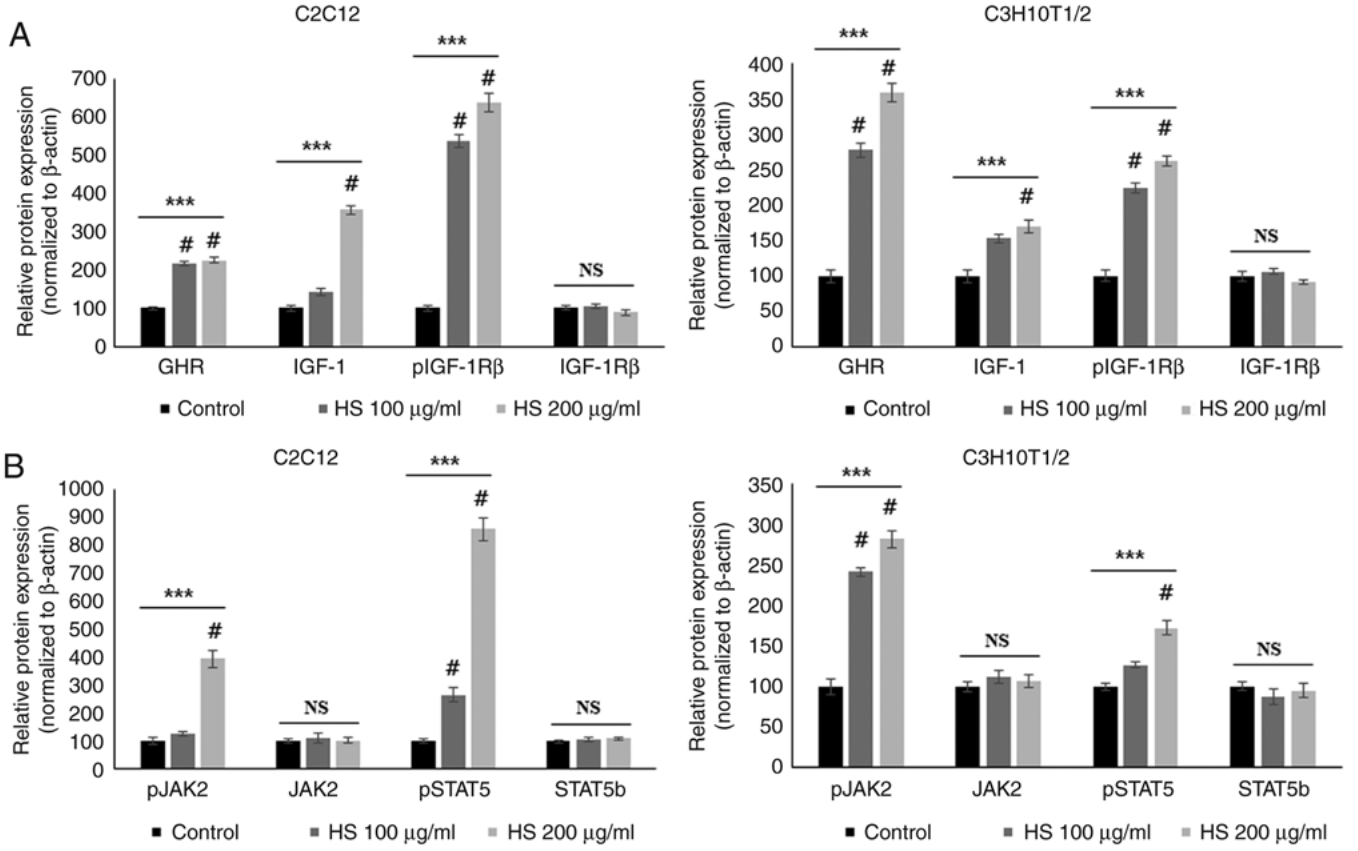

Figure S4. Western blot analysis of pJAK2, total JAK2, pSTAT5, total STAT5b and IGF-1 protein expression in C3H10T1/2 cells treated with HS extract. Cells were incubated with 200 μg/ml HS extract and 25 μM AG490 (JAK2 inhibitor) for 24 h, followed by protein extraction and immunoblotting. p, phosphorylated; IGF, insulin-like growth factor; HS, hemp seed.

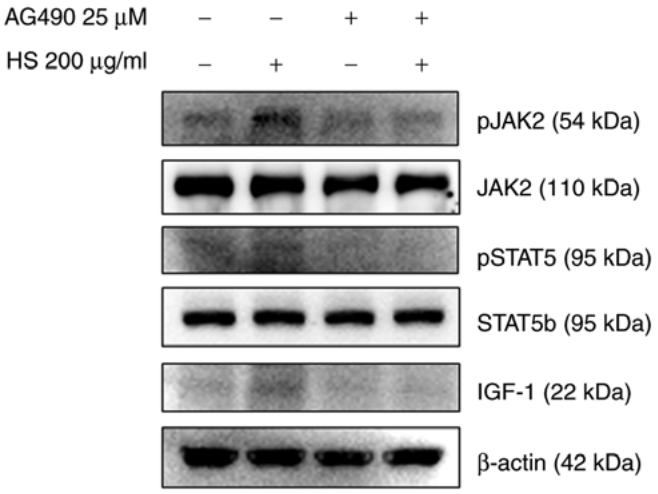

Figure S5. ELISA showing increased IGF-1 production in C3H10T1/2 cells treated with hemp seed extract. #P<0.001 vs. control. IGF, insulin-like growth factor.